IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Baker et al.

Serial No.: Not yet assigned

Filed: Herewith

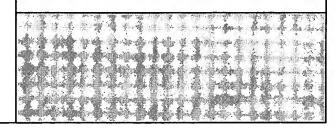
For: Secreted and Transmembrane

Polypeptides and Nucleic Acids

Encoding the Same

Group Art Unit: Not yet assigned

Examiner: Not yet assigned



REQUEST TO USE COMPUTER READABLE FORM OF SEQUENCE LISTING FROM PARENT APPLICATION PURSUANT TO 37 C.F.R. § 1.821 (e)

Assistant Commissioner of Patents Washington, D.C. 20231

Sir:

The patent application filed herewith is a continuing application of currently pending application Serial No. 09/866,028, filed on May 25, 2001. The Sequence Listings in (a) the herewith filed patent application and (2) currently pending patent application Serial No.09/866,028, filed on May 25, 2001, are identical. Therefore, pursuant to 37 C.F.R. § 1.821(e), Applicants respectfully request that the compliant computer readable form of the Sequence Listing filed on May 25, 2001 in parent application Serial No. 09/866,028 be used as the computer readable form for the herewith filed patent application. The paper copy of the Sequence Listing submitted herewith

Serial No.: Not yet assigned

Filed: Herewith

PATENT TRADEMARK OFFICE

is identical to that on the compliant computer readable form of the Sequence Listing filed on May 25, 2001 in parent application Serial No. 09/866,028.

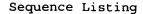
Respectfully submitted,

GENENTECH, INC.

Elizabeth M. Barnes, Ph.D. Reg. No. 35,059

Telephone: (650) 225-4563

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<110> Baker, Kevin Botstein, David Eaton, Dan Ferrara, Napoleone Filvaroff, Ellen Gerritsen, Mary Goddard, Audrey Godowski, Paul Grimaldi, Christopher Gurney, Austin Hillan, Kenneth Kljavin, Ivar Napier, Mary Roy, Margaret Tumas, Daniel Wood, William

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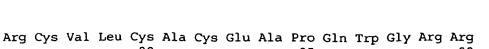
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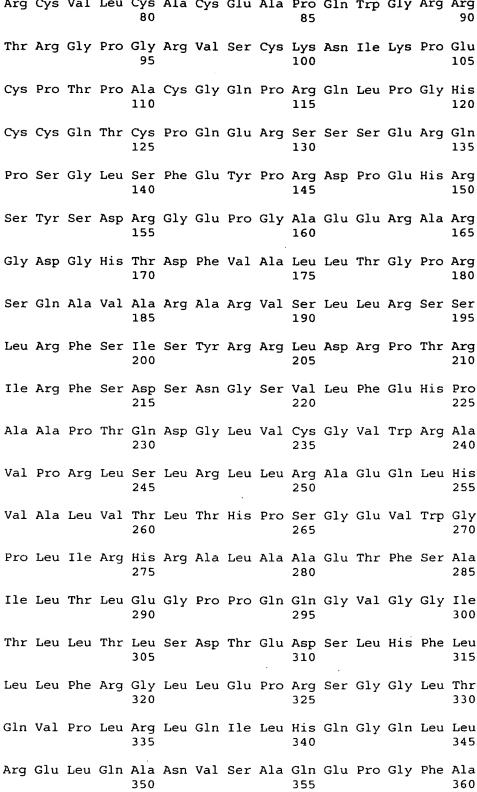
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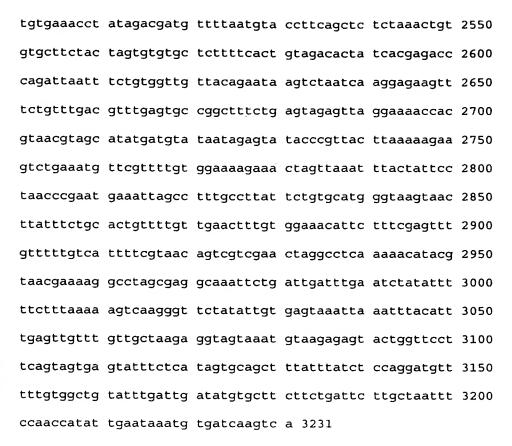
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<211> 737

<212> PRT

<213> Homo Sapien

<400> 15

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Ser Ser Leu Ala Asn Pro Val Pro Ala Ala Pro Leu Ser Ala Pro 35 40 45

Gly Pro Cys Ala Ala Gln Pro Cys Arg Asn Gly Gly Val Cys Thr
50 55 60

Ser Arg Pro Glu Pro Asp Pro Gln His Pro Ala Pro Ala Gly Glu 65 70 75

Pro Gly Tyr Ser Cys Thr Cys Pro Ala Gly Ile Ser Gly Ala Asn 80 85 90

Cys Gln Leu Val Ala Asp Pro Cys Ala Ser Asn Pro Cys His His

Gly Asn Cys Ser Ser Ser Ser Ser Ser Ser Ser Asp Gly Tyr Leu

				110					115					120
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Leu	Pro	Ser	Leu	Pro 140	Ala	Thr	Gly	Trp	Thr 145	Glu	Ser	Met	Ala	Pro 150
Arg	Gln	Leu	Gln	Pro 155	Val	Pro	Ala	Thr	Gln 160	Glu	Pro	Asp	Lys	Ile 165
Leu	Pro	Arg	Ser	Gln 170	Ala	Thr	Val	Thr	Leu 175	Pro	Thr	Trp	Gln	Pro 180
Lys	Thr	Gly	Gln	Lys 185	Val	Val	Glu	Met	Lys 190	Trp	Asp	Gln	Val	Glu 195
Val	Ile	Pro	Asp	Ile 200	Ala	Cys	Gly	Asn	Ala 205	Ser	Ser	Asn	Ser	Ser 210
Ala	Gly	Gly	Arg	Leu 215	Val	Ser	Phe	Glu	Val 220	Pro	Gln	Asn	Thr	Ser 225
Val	Lys	Ile	Arg	Gln 230	Asp	Ala	Thr	Ala	Ser 235	Leu	Ile	Leu	Leu	Trp 240
Lys	Val	Thr	Ala	Thr 245	Gly	Phe	Gln	Gln	Cys 250	Ser	Leu	Ile	Asp	Gly 255
Arg	Ser	Val	Thr	Pro 260	Leu	Gln	Ala	Ser	Gly 265	Gly	Leu	Val	Leu	Leu 270
Glu	Glu	Met	Leu	Ala 275	Leu	Gly	Asn	Asn	His 280	Phe	Ile	Gly	Phe	Val 285
Asn	Asp	Ser	Val	Thr 290	Lys	Ser	Ile	Val	Ala 295	Leu	Arg	Leu	Thr	Leu 300
Val	Val	Lys	Val	Ser 305	Thr	Cys	Val	Pro	Gly 310	Glu	Ser	His	Ala	Asn 315
Asp	Leu	Glu	Cys	Ser 320	Gly	Lys	Gly	Lys	Cys 325	Thr	Thr	Lys	Pro	Ser 330
Glu	Ala	Thr	Phe	Ser 335	Cys	Thr	Cys	Glu	Glu 340	Gln	Tyr	Val	Gly	Thr 345
Phe	Cys	Glu	Glu	Tyr 350	Asp	Ala	Cys	Gln	Arg 355	Lys	Pro	Cys	Gln	Asn 360
Asn	Ala	Ser	Cys	Ile 365	Asp	Ala	Asn	Glu	Lys 370	Gln	Asp	Gly	Ser	Asn 375
Phe	Thr	Cys	Val	Cys 380	Leu	Pro	Gly	Tyr	Thr 385	Gly	Glu	Leu	Cys	Gln 390
Ser	Lys	Ile	Asp	Tyr 395	Cys	Ile	Leu	Asp	Pro 400	Cys	Arg	Asn	Gly	Ala 405

Thr Cys Ile Ser Ser Leu Ser Gly Phe Thr Cys Gln Cys Pro Glu 410 Gly Tyr Phe Gly Ser Ala Cys Glu Glu Lys Val Asp Pro Cys Ala Ser Ser Pro Cys Gln Asn Asn Gly Thr Cys Tyr Val Asp Gly Val 440 445 His Phe Thr Cys Asn Cys Ser Pro Gly Phe Thr Gly Pro Thr Cys 460 Ala Gln Leu Ile Asp Phe Cys Ala Leu Ser Pro Cys Ala His Gly 470 Thr Cys Arg Ser Val Gly Thr Ser Tyr Lys Cys Leu Cys Asp Pro Gly Tyr His Gly Leu Tyr Cys Glu Glu Glu Tyr Asn Glu Cys Leu 500 Ser Ala Pro Cys Leu Asn Ala Ala Thr Cys Arg Asp Leu Val Asn Gly Tyr Glu Cys Val Cys Leu Ala Glu Tyr Lys Gly Thr His Cys Glu Leu Tyr Lys Asp Pro Cys Ala Asn Val Ser Cys Leu Asn Gly Ala Thr Cys Asp Ser Asp Gly Leu Asn Gly Thr Cys Ile Cys Ala Pro Gly Phe Thr Gly Glu Glu Cys Asp Ile Asp Ile Asn Glu Cys Asp Ser Asn Pro Cys His His Gly Gly Ser Cys Leu Asp Gln Pro Asn Gly Tyr Asn Cys His Cys Pro His Gly Trp Val Gly Ala Asn 605 Cys Glu Ile His Leu Gln Trp Lys Ser Gly His Met Ala Glu Ser Leu Thr Asn Met Pro Arg His Ser Leu Tyr Ile Ile Ile Gly Ala Leu Cys Val Ala Phe Ile Leu Met Leu Ile Ile Leu Ile Val Gly Ile Cys Arg Ile Ser Arg Ile Glu Tyr Gln Gly Ser Ser Arg Pro Ala Tyr Glu Glu Phe Tyr Asn Cys Arg Ser Ile Asp Ser Glu Phe Ser Asn Ala Ile Ala Ser Ile Arg His Ala Arg Phe Gly Lys Lys Ser Arg Pro Ala Met Tyr Asp Val Ser Pro Ile Ala Tyr Glu Asp 710 715 720

Tyr Ser Pro Asp Asp Lys Pro Leu Val Thr Leu Ile Lys Thr Lys
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Asp Leu

<210> 16

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

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<210> 17

<211> 41

<212> DNA

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<220>

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<210> 18

<211> 508

<212> DNA

<213> Homo Sapien

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acgaaagtgt gaccccctt tcaggctttc agggggactg gtcctcctgg 100

aggagatget egeettgggg aataateact ttattggttt tgtgaatgat 150

totgtgacta agtotattgt ggotttgcgc ttaactotgg tggtgaaggt 200

cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagtgttcag 250

gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttcctqtacc 300

tgtgaggage agtacgtggg tactttctgt gaagaatacg atgcttgcca 350

gaggaaacct tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400

aagatgggag caatttcacc tgtgtttgcc ttcctggtta tactggagag 450

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 tetgtgaeta agtetattgt ggetttgege ttaactetgg tggtgaaggt 200
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 taggggag 508
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<223> Synthetic oligonucleotide probe

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getttgeeaa eegaactga 69

<210> 23

<211> 1520

<212> DNA

<213> Homo Sapien

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<210> 24 <211> 433 <212> PRT

<213> Homo Sapien

<400> 24

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Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn 160

Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr 170

Tyr Met Leu Gly Val His Ser Phe Tyr 175

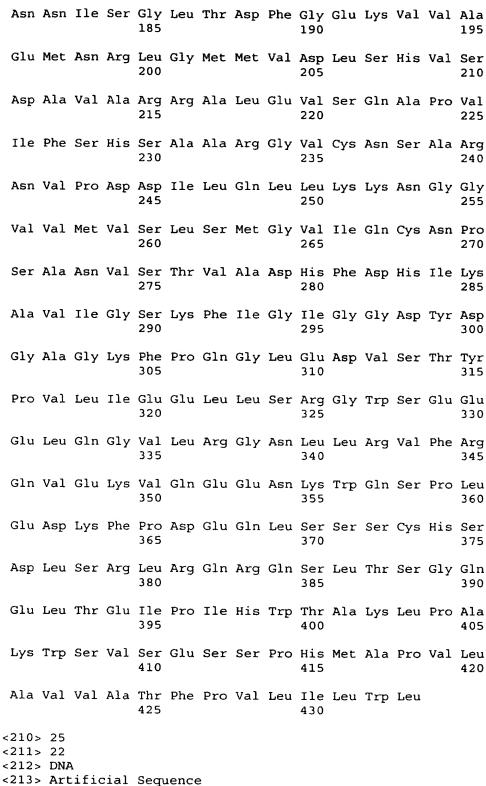
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Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu

110

115

120



- <220>
- <223> Synthetic oligonucleotide probe

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    cgaccacact cagtagtccc agcacccagg gcctgcaaga gcaggcacgg 150
    gccctgatgc gggacttccc gctcgtggac ggccacaacg acctgcccct 200
    ggtcctaagg caggtttacc agaaagggct acaggatgtt aacctgcgca 250
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<211> 446

<212> PRT

<213> Homo Sapien

<400> 30

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20 25 30

Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln 35 40 45

Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser

				50					55					60
Tyr	Gly	Gln	Thr	Ser 65	Leu	Asp	Arg	Leu	Arg 70	Asp	Gly	Leu	Val	Gly 75
Ala	Gln	Phe	Trp	Ser 80	Ala	Tyr	Val	Pro	Cys 85	Gln	Thr	Gln	Asp	Arg 90
Asp	Ala	Leu	Arg	Leu 95	Thr	Leu	Glu	Gln	Ile 100	Asp	Leu	Ile	Arg	Arg 105
Met	Cys	Ala	Ser	Tyr 110	Ser	Glu	Leu	Glu	Leu 115	Val	Thr	Ser	Ala	Lys 120
Ala	Leu	Asn	Asp	Thr 125	Gln	Lys	Leu	Ala	Cys 130	Leu	Ile	Gly	Val	Glu 135
Gly	Gly	His	Ser	Leu 140	Asp	Asn	Ser	Leu	Ser 145	Ile	Leu	Arg	Thr	Phe 150
Tyr	Met	Leu	Gly	Val 155	Arg	Tyr	Leu	Thr	Leu 160	Thr	His	Thr	Cys	Asn 165
Thr	Pro	Trp	Ala	Glu 170	Ser	Ser	Ala	Lys	Gly 175	Val	His	Ser	Phe	Tyr 180
Asn	Asn	Ile	Ser	Gly 185	Leu	Thr	Asp	Phe	Gly 190	Glu	Lys	Val	Val	Ala 195
Glu	Met	Asn	Arg	Leu 200	Gly	Met	Met	Val	Asp 205	Leu	Ser	His	Val	Ser 210
Asp	Ala	Val	Ala	Arg 215	Arg	Ala	Leu	Glu	Val 220	Ser	Gln	Ala	Pro	Val 225
Ile	Phe	Ser	His	Ser 230	Ala	Ala	Arg	Gly	Val 235	Cys	Asn	Ser	Ala	Arg 240
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Val	Val	Met	Val	Ser 260	Leu	Ser	Met	Gly	Val 265		Gln	Cys	Asn	Pro 270
Ser	Ala	Asn	Val	Ser 275	Thr	Val	Ala	Asp	His 280	Phie	Asp	His	Ile	Lys 285
Ala	Val	Ile	Gly	Ser 290	Lys	Phe	Ile	Gly	Ile 295	Gly	Gly	Asp	Tyr	Asp 300
Gly	Ala	Gly	Lys	Phe 305	Pro	Gln	Gly	Leu	Glu 310	Asp	Val	Ser	Thr	Tyr 315
Pro	Val	Leu	Ile	Glu 320	Glu	Leu	Leu	Ser	Arg 325	Gly	Trp	Ser	Glu	Glu 330
Glu	Leu	Gln	Gly	Val 335	Leu	Arg	Gly	Asn	Leu 340	Leu	Arg	Val	Phe	Arg 345

Gln Val Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu 360

Glu Asp Lys Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser 375

Asp Leu Ser Arg Leu Arg Gln Arg Gln Ser Leu Thr Ser Gly Gln 380

Glu Leu Thr Glu Ile Pro Ile His Trp Thr Ala Lys Leu Pro Ala 405

Lys Trp Ser Val Ser Glu Ser Ser Pro His Pro Asp Lys Thr His 420

Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser 435

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr

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<210> 32

<211> 422

<212> PRT

<213> Homo Sapien

<400> 32

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Pro Pro Pro Leu Leu Pro Leu Leu Leu Leu Cys Val Leu Gly
20 25 30

Ala Pro Arg Ala Gly Ser Gly Ala His Thr Ala Val Ile Ser Pro
35 40 45

Gln Asp Pro Thr Leu Leu Ile Gly Ser Ser Leu Leu Ala Thr Cys
50 55 60

Ser Val His Gly Asp Pro Pro Gly Ala Thr Ala Glu Gly Leu Tyr Trp Thr Leu Asn Gly Arg Arg Leu Pro Pro Glu Leu Ser Arg Val Leu Asn Ala Ser Thr Leu Ala Leu Ala Leu Ala Asn Leu Asn Gly Ser Arg Gln Arg Ser Gly Asp Asn Leu Val Cys His Ala Arg Asp Gly Ser Ile Leu Ala Gly Ser Cys Leu Tyr Val Gly Leu Pro Pro Glu Lys Pro Val Asn Ile Ser Cys Trp Ser Lys Asn Met Lys Asp 145 Leu Thr Cys Arg Trp Thr Pro Gly Ala His Gly Glu Thr Phe Leu 155 His Thr Asn Tyr Ser Leu Lys Tyr Lys Leu Arg Trp Tyr Gly Gln 175 180 Asp Asn Thr Cys Glu Glu Tyr His Thr Val Gly Pro His Ser Cys 190 His Ile Pro Lys Asp Leu Ala Leu Phe Thr Pro Tyr Glu Ile Trp 200 205 210 Val Glu Ala Thr Asn Arg Leu Gly Ser Ala Arg Ser Asp Val Leu Thr Leu Asp Ile Leu Asp Val Val Thr Thr Asp Pro Pro Pro Asp 230 235 240 Val His Val Ser Arg Val Gly Gly Leu Glu Asp Gln Leu Ser Val 250 Arg Trp Val Ser Pro Pro Ala Leu Lys Asp Phe Leu Phe Gln Ala 260 265 270 Lys Tyr Gln Ile Arg Tyr Arg Val Glu Asp Ser Val Asp Trp Lys 280 Val Val Asp Asp Val Ser Asn Gln Thr Ser Cys Arg Leu Ala Gly 290 295 300 Leu Lys Pro Gly Thr Val Tyr Phe Val Gln Val Arg Cys Asn Pro 305 Phe Gly Ile Tyr Gly Ser Lys Lys Ala Gly Ile Trp Ser Glu Trp 320 Ser His Pro Thr Ala Ala Ser Thr Pro Arg Ser Glu Arg Pro Gly Pro Gly Gly Gly Ala Cys Glu Pro Arg Gly Glu Pro Ser Ser

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 Lys His Ala Tyr Cys Ser Asn Leu Ser Phe Arg Leu Tyr Asp Gln
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Val Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg 20 25 30

Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly 35 40 45

His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
50 55 60

Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu 65 70 75

Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe 80 85 90

Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys 95 100 105

Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn 110 115 120

Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro 125 130 135

Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp 140 145 150

Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
155 160 160

His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro 170 175 180

Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe 185 190 195

His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile Thr Gly

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<213> Homo Sapien

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Ser Pro Pro Leu Asp Asp Asn Lys Ile Pro Ser Leu Cys Pro Gly
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His Pro Gly Leu Pro Gly Thr Pro Gly His His Gly Ser Gln Gly
35 40 45

Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Pro Gly
50 55 60

Ala Pro Gly Glu Lys Gly Glu Gly Gly Arg Pro Gly Leu Pro Gly
65 70 75

Pro Arg Gly Asp Pro Gly Pro Arg Gly Glu Ala Gly Pro Ala Gly

Pro Thr Gly Pro Ala Gly Glu Cys Ser Val Pro Pro Arg Ser Ala 95 100 105

Phe Ser Ala Lys Arg Ser Glu Ser Arg Val Pro Pro Pro Ser Asp 110 115 120

Ala Pro Leu Pro Phe Asp Arg Val Leu Val Asn Glu Gln Gly His
125
130
130

Tyr Asp Ala Val Thr Gly Lys Phe Thr Cys Gln Val Pro Gly Val

Tyr Tyr Phe Ala Val His Ala Thr Val Tyr Arg Ala Ser Leu Gln
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Phe Asp Leu Val Lys Asn Gly Glu Ser Ile Ala Ser Phe Phe Gln 170 175 180

Phe Phe Gly Gly Trp Pro Lys Pro Ala Ser Leu Ser Gly Gly Ala 185 190 195

Met Val Arg Leu Glu Pro Glu Asp Gln Val Trp Val Gln Val Gly 200 205 210

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Pro Gln Leu Gln Glu Gln Ala Pro Met Ala Gly Ala Leu Asn Arg
35 40 45

Lys Glu Ser Phe Leu Leu Ser Leu His Asn Arg Leu Arg Ser
50 55 60

Trp Val Gln Pro Pro Ala Ala Asp Met Arg Arg Leu Asp Trp Ser
65 70 75

Asp Ser Leu Ala Gln Leu Ala Gln Ala Arg Ala Ala Leu Cys Gly 80 85 90

Ile Pro Thr Pro Ser Leu Ala Ser Gly Leu Trp Arg Thr Leu Gln
95 100 105

Val Gly Trp Asn Met Gln Leu Leu Pro Ala Gly Leu Ala Ser Phe

				110					115					120
Val G	lu	Val	Val	Ser 125	Leu	Trp	Phe	Ala	Glu 130	Gly	Gln	Arg	Tyr	Ser 135
His A	la	Ala	Gly	Glu 140	Cys	Ala	Arg	Asn	Ala 145	Thr	Cys	Thr	His	Tyr 150
Thr G	ln	Leu	Val	Trp 155	Ala	Thr	Ser	Ser	Gln 160	Leu	Gly	Cys	Gly	Arg 165
His L	eu	Cys	Ser	Ala 170	Gly	Gln	Thr	Ala	Ile 175	Glu	Ala	Phe	Val	Cys 180
Ala T	'yr	Ser	Pro	Gly 185	Gly	Asn	Trp	Glu	Val 190	Asn	Gly	Lys	Thr	Ile 195
Ile P	ro	Tyr	Lys	Lys 200	Gly	Ala	Trp	Cys	Ser 205	Leu	Cys	Thr	Ala	Ser 210
Val S	er	Gly	Суѕ	Phe 215	Lys	Ala	Trp	Asp	His 220	Ala	Gly	Gly	Leu	Cys 225
Glu V	'al	Pro	Arg	Asn 230	Pro	Cys	Arg	Met	Ser 235	Cys	Gln	Asn	His	Gly 240
Arg L	eu	Asn	Ile	Ser 245	Thr	Cys	His	Cys	His 250	Cys	Pro	Pro	Gly	Tyr 255
Thr G	ly	Arg	Tyr	Cys 260	Gln	Val	Arg	Cys	Ser 265	Leu	Gln	Cys	Val	His 270
Gly A	rg	Phe	Arg	Glu 275	Glu	Glu	Cys	Ser	Cys 280	Val	Cys	Asp	Ile	Gly 285
Tyr G	ly	Gly	Ala	Gln 290	Cys	Ala	Thr	Lys	Val 295	His	Phe	Pro	Phe	His 300
Thr C	'ys	Asp	Leu	Arg 305	Ile	Asp	Gly	Asp	Cys 310	Phe	Met	Val	Ser	Ser 315
Glu A	la	Asp	Thr	Tyr 320	Tyr	Arg	Ala	Arg	Met 325	Lys	Cys	Gln	Arg	Lys 330
Gly G	ly	Val		Ala 335	Gln	Ile	Lys	Ser	Gln 340	Lys	Val	Gln	Asp	Ile 345
Leu A	la	Phe	Tyr	Leu 350	Gly	Arg	Leu	Glu	Thr 355	Thr	Asn	Glu	Val	Thr 360
Asp S	er	Asp	Phe	Glu 365	Thr	Arg	Asn	Phe	Trp 370	Ile	Gly	Leu	Thr	Tyr 375
Lys T	hr	Ala	Lys	Asp 380	Ser	Phe	Arg	Trp	Ala 385	Thr	Gly	Glu	His	Gln 390
Ala P	he	Thr	Ser	Phe 395	Ala	Phe	Gly	Gln	Pro 400	Asp	Asn	His	Gly	Leu 405

Val Trp Leu Ser Ala Ala Met Gly Phe Gly Asn Cys Val Glu Leu 410 Gln Ala Ser Ala Ala Phe Asn Trp Asn Asp Gln Arg Cys Lys Thr Arg Asn Arg Tyr Ile Cys Gln Phe Ala Gln Glu His Ile Ser Arg Trp Gly Pro Gly Ser 455 <210> 51 <211> 24 <212> DNA <213> Artificial Sequence <220> <223> Synthetic oligonucleotide probe <400> 51 aggaacttct ggatcgggct cacc 24 <210> 52 <211> 24 <212> DNA <213> Artificial Sequence <223> Synthetic oligonucleotide probe <400> 52 gggtctgggc caggtggaag agag 24 <210> 53 <211> 45 <212> DNA <213> Artificial Sequence <220> <223> Synthetic oligonucleotide probe gccaaggact ccttccgctg ggccacaggg gagcaccagg ccttc 45 <210> 54 <211> 2331 <212> DNA <213> Homo Sapien <400> 54 cggacgcgtg ggctgggcgc tgcaaagcgt gtcccgccgg gtccccgagc 50 gtcccgcgcc ctcgccccgc catgctcctg ctgctggggc tgtgcctggg 100 gctgtccctg tgtgtggggt cgcaggaaga ggcgcagagc tggggccact 150

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<213> Homo Sapien

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Asp Gly Leu Arg Val Pro Arg Gln Val Arg Leu Leu Gln Arg Leu
35 40 45

Lys Thr Lys Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile
50 55 60

Ile Ser Arg Tyr Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn
65 70 75

Arg Ala Ser Glu Asp Gln Asp Ile Glu Phe Gln Met Gln Ile Pro 80 85 90

Ala Ala Ala Phe Ile Thr Asn Phe Thr Met Leu Ile Gly Asp Lys
95 100 105

Val Tyr Gln Gly Glu Ile Thr Glu Arg Glu Lys Lys Ser Gly Asp 110 115 120

Arg Val Lys Glu Lys Arg Asn Lys Thr Thr Glu Glu Asn Gly Glu Lys Gly Thr Glu Ile Phe Arg Ala Ser Ala Val Ile Pro Ser Lys Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu Glu Leu Leu Gln Arg 160 Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val Arg Pro Gln Gln 175 Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu Glu Ser Ala 185 190 Gly Ile Ala Ser Leu Glu Val Leu Pro Leu His Asn Ser Arg Gln 200 205 Arg Gly Ser Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro Ser 215 Thr Val Ile Asn Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys 230 Pro Thr Val Val Gln Gln Ala Arg Ile Ala Gln Asn Gly Ile Leu Gly Asp Phe Ile Ile Arg Tyr Asp Val Asn Arg Glu Gln Ser Ile 260 Gly Asp Ile Gln Val Leu Asn Gly Tyr Phe Val His Tyr Phe Ala Pro Lys Asp Leu Pro Pro Leu Pro Lys Asn Val Val Phe Val Leu 290 Asp Ser Ser Ala Ser Met Val Gly Thr Lys Leu Arg Gln Thr Lys Asp Ala Leu Phe Thr Ile Leu His Asp Leu Arg Pro Gln Asp Arg 320 Phe Ser Ile Ile Gly Phe Ser Asn Arg Ile Lys Val Trp Lys Asp His Leu Ile Ser Val Thr Pro Asp Ser Ile Arg Asp Gly Lys Val 350 Tyr Ile His His Met Ser Pro Thr Gly Gly Thr Asp Ile Asn Gly Ala Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr Val Ala His 380 Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu Thr Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu

		410					415					420
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Ile Gly Ile		Asn 440	Asp	Val	Asp	Phe	Arg 445	Leu	Leu	Glu	Lys	Leu 450
Ser Leu Gl		Cys (Gly	Leu	Thr	Arg	Arg 460	Val	His	Glu	Glu	Glu 465
Asp Ala Gl		Gln : 470	Leu	Ile	Gly	Phe	Tyr 475	Asp	Glu	Ile	Arg	Thr 480
Pro Leu Le		Asp 485	Ile	Arg	Ile	Asp	Tyr 490	Pro	Pro	Ser	Ser	Val 495
Val Gln Ala		Lys ' 500	Thr	Leu	Phe	Pro	Asn 505	Tyr	Phe	Asn	Gly	Ser 510
Glu Ile Ile		Ala (Gly	Lys	Leu	Val	Asp 520	Arg	Lys	Leu	Asp	His 525
Leu His Va		Val ' 530	Thr	Ala	Ser	Asn	Ser 535	Lys	Lys	Phe	Ile	Ile 540
Leu Lys Th	_	Val 545	Pro	Val	Arg	Pro	Gln 550	Lys	Ala	Gly	Lys	Asp 555
Val Thr Gly		Pro . 560	Arg	Pro	Gly	Gly	Asp 565	Gly	Glu	Gly	Asp	Thr 570
Asn His Ile		Arg	Leu	Trp	Ser	Tyr	Leu 580	Thr	Thr	Lys	Glu	Leu 585
Leu Ser Se		Leu 590	Gln	Ser	qaA	Asp	Glu 595	Pro	Glu	Lys	Glu	Arg 600
Leu Arg Gli		Ala (Gln	Ala	Leu	Ala	Val 610	Ser	Tyr	Arg	Phe	Leu 615
Thr Pro Phe		Ser 620	Met	Lys	Leu	Arg	Gly 625	Pro	Val	Pro	Arg	Met 630
Asp Gly Le		Glu / 635	Ala	His	Gly	Met	Ser 640	Ala	Ala	Met	Gly	Pro 645
Glu Pro Va		Gln : 650	Ser	Val	Arg	Gly	Ala 655	Gly	Thr	Gln	Pro	Gly 660
Pro Leu Leu		Lys 665	Pro	Asn	Ser	Val	Lys 670	Lys	Lys	Gln	Asn	Lys 675
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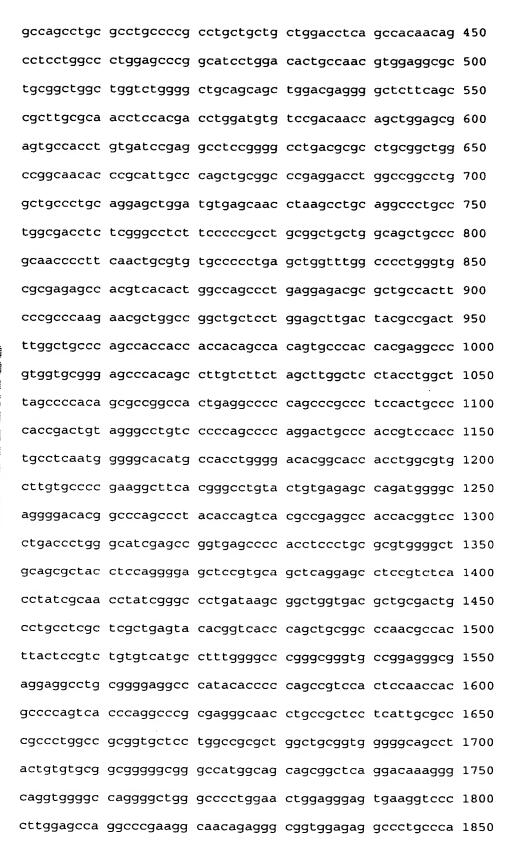
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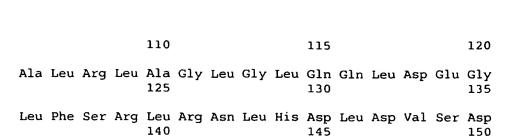
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Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly 155 160 165

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Pro Pro Lys Asn Ala Gly Arg Leu Leu Glu Leu Asp Tyr Ala 260 265 270

Asp Phe Gly Cys Pro Ala Thr Thr Thr Thr Ala Thr Val Pro Thr 275 280 285

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Ala Pro Thr Trp Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro 305 310 315

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Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys 335 340 345

His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys Pro Glu Gly 350 355 360

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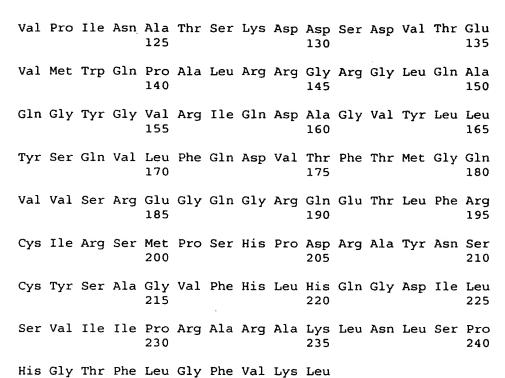
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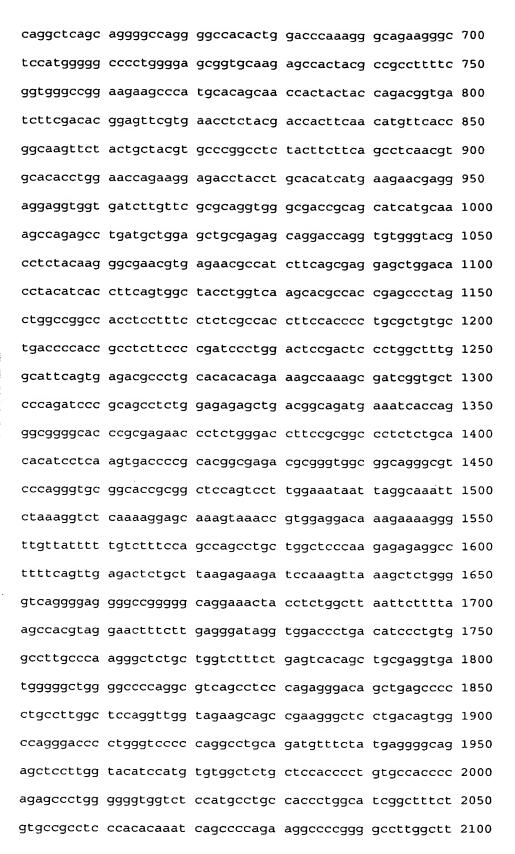
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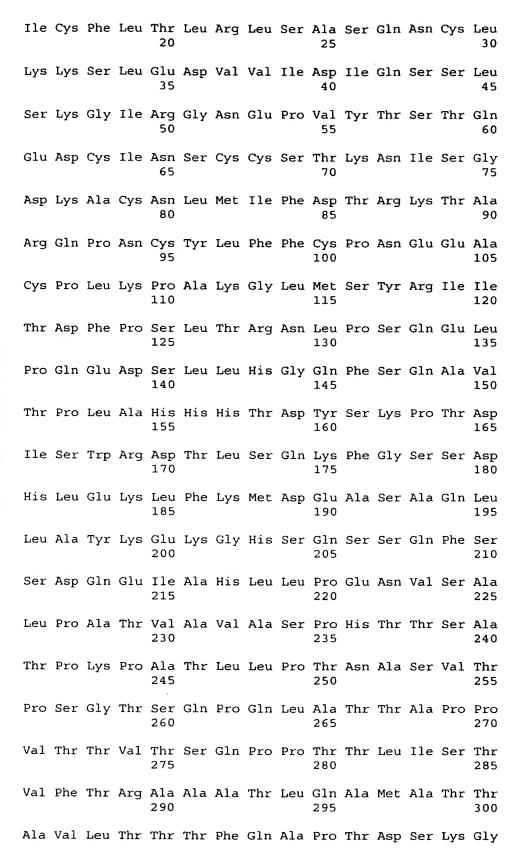
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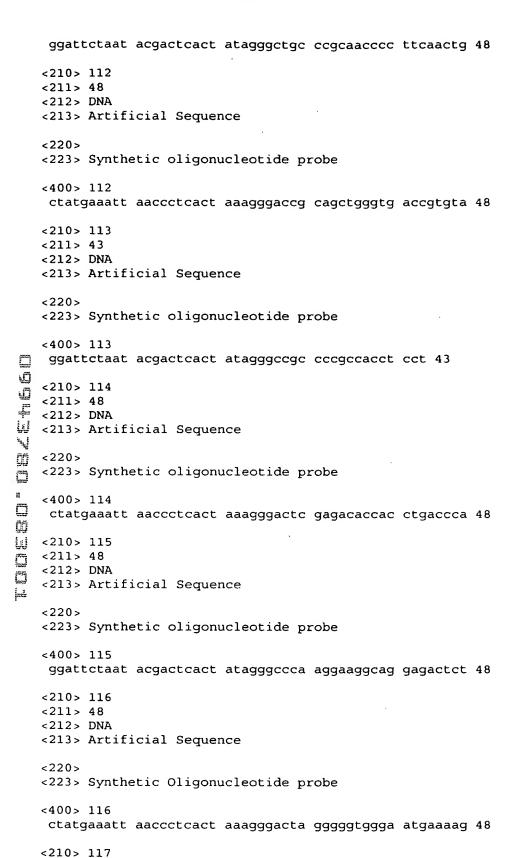
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APPENDIX A

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional applications listed below:

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60/067,411 filed December 3, 1997;
60/069,334 filed December 11, 1997;
60/069335 filed December 11, 1997;
60/069,278 filed December 11, 1997;
60/069,425 filed December 12, 1997;
60/069,696 filed December 16, 1997;
60/069,694 filed December 16, 1997;
60/069,702 filed December 16, 1997;
60/069,870 filed December 17, 1997;
60/069,873 filed December 17, 1997;
60/068,017 filed December 18, 1997;
60/070,440 filed January 5, 1998;
60/074,086 filed February 9, 1998;
607674,092 filed February 9, 1998;
607075,945 filed February 25, 1998;
60/412,850 filed December 16, 1998;
60 13,296 filed December 22, 1998;
607146,222 filed July 28, 1999.
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APPENDIX B

I hereby claim the benefit under Title 35, United States Code, §120 of any United States and PCT patent applications listed below:

PCT/US98/19330 filed September 16, 1998;

PCT/US98/25108 filed December 1, 1998;

09/216,021 filed December 16, 1998;

09/218,517 filed December 22, 1998;

09/254,311 filed March 3, 1999;

PCT/US99/12252 filed June 2, 1999;

PCT/US99/21090 filed September 15, 1999;

PCT/US99/28409 filed November 30, 1999;

PCT/US99/28313 filed November 30, 1999;

PCT/US99/28301 filed December1, 1999;

PET/US99/30095 filed December 16, 1999;

PCT/US00/03565 filed February 11, 2000;

PCT/US00/04414 filed February 22, 2000;

PCT/US00/05841 filed March 2, 2000;

PCT/US00/08439 filed March 30, 2000;

PCT/US00/14042 filed May 22, 2000;

P€T/US00/20710 filed July 28, 2000;

PCT/US00/32678 filed December 1, 2000;

PCT/US01/06520 filed February 28, 2001.